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Group Art Unit: 3765

**APPENDIX A**

17. A method of diagnosing disease in a subject, comprising:  
applying a pathology differentiating agent on a tissue;  
providing an automated triggering signal to initiate a measurement period relative to said applying step;  
measuring a temporal evolution of an optical signal observed from said tissue during said measurement period; and  
providing a diagnosis based upon said temporal evolution.
18. The method of claim 17, wherein said triggering signal is provided substantially simultaneously with said dispensing step.
19. The method of claim 17, wherein said measuring step comprises measuring said temporal evolution at at least one predetermined time relative to said triggering signal.
20. A method for diagnosing disease in a subject, comprising:  
dispensing a pathology differentiating agent on a tissue;  
capturing a plurality of sequential images of said tissue during a measurement period;  
aligning a subset of said plurality of images to spatially correlate said subset,  
measuring a temporal evolution of an optical signal from said subset of spatially correlated images; and  
providing a diagnosis based on said temporal evolution.
21. The method of claim 20, wherein said measuring step is performed at predetermined times relative to said dispensing step.
22. The method of claim 20, wherein said tissue is selected from the group consisting of cervical tissue, skin, colorectal tissue, and gastric tissue.